SOURCE SELECTION STATEMENT

DESIGN/BUILD and COMMISSION of a REPLACEMENT REFRIGERATION PLANT for the ICING RESEARCH TUNNEL (IRT) TESTING CAPABILITIES

REQUEST FOR PROPOSAL (RFP) NNC09ZF031Q

Background

The NASA Glenn Research Center in Cleveland, Ohio, is home to one of the most highly utilized research facilities in the Agency. The Icing Research Tunnel (IRT) plays a substantial role in developing, testing, and certifying methods to prevent ice buildup on all forms of aircraft as well as the effects of ice accumulation on the performance and stability of aircraft. Current work activities in the IRT include the investigation of deicing and anti-icing research on aircraft and certification of ice protection systems for military and commercial aircraft. The performance of the IRT is considered critical to NASA's continued commitment to aviation safety.

Procurement Description

The Glenn Research Center has a requirement to upgrade the performance of the IRT. This requirement includes design services for development and finalization of a large scale icing wind tunnel heat exchanger and refrigeration plant; demolition/removal of the existing tunnel heat exchanger; fabrication and installation of a new icing wind tunnel heat exchanger, support systems, and refrigeration plant; and the construction of a new refrigeration plant building.

The Government anticipates the award a single Fixed Price contract for the above described effort. The overall statement of work includes a base effort plus eight options.

The Period of Performance will be twenty (20) months from the effective date of the contract for the design/build project. The place of performance will be on-site at the NASA-Glenn Research Center, Cleveland, Ohio.

Procurement History

A Source Evaluation Committee (SEC) was established for this procurement. The SEC team included personnel from Procurement, Construction of Facilities, members of the Icing Research Tunnel technical management and several technical experts from various testing disciplines.

On September 2, 2009, the Government issued a sources sought synopsis. The intent of the synopsis was to identify potential sources to support any set aside considerations. Based on the evaluation of the responses to the sources sought synopsis, a decision was made not to set aside this procurement, but to add subcontracting goals.

To support this requirement, a Two-Phase Design Build procurement in accordance with FAR Subpart 36.3 was initiated. Phase-One of the competition provides for an evaluation of offers on the basis of technical approach and technical qualifications. Per FAR Subpart 36.3, neither the detailed technical approach nor price was included in the Phase-One process. A Phase-One Request for Qualifications (RFQ) solicitation was issued on September 23, 2009, on an unrestricted basis. After evaluating Phase-One proposals, a selection of the most highly qualified offerors, not-to-exceed the maximum number of

three (3) as specified in the solicitation, was made and only those selected offerors would be invited to submit a Phase-Two proposal.

Phase-One Evaluation

The following five firms responded by the solicitation due date of October 9, 2009:

The Benham Companies
Walled Lake, MI 48390

KBJ, Incorporated
Willoughby, OH 44094

Brinkmann Constructors
Chesterfield, MO 63005

Jacobs Technology Inc.
Tullahoma, TN 37388

Panzica Construction
Mayfield Village, OH 44143

The Phase One proposals were evaluated by the SEC in accordance with Federal Acquisition Regulation (FAR) 15.3- Source Selection, NASA FAR Supplement 1815.3-Source Selection and the evaluation criteria set forth in the RFP.

As a result of the Phase-One evaluation the following three companies were selected to proceed on to Phase-Two:

The Benham Companies
Brinkmann Constructors
Jacobs Technology Inc

Phase-Two Evaluation

The Phase-Two Request for Proposal (RFP) was issued to the three companies listed above on November 19, 2009. Five amendments were issued to the RFP. On December 16, 2009, Brinkmann Constructors submitted a letter to the Contracting Officer, withdrawing from the Phase-Two competition stating that the difficulty in meeting the specifications for the tunnel performance requirements, the short time frame to prepare the proposal response and the cost of preparing a proposal, as the reasons for the withdrawal.

As a result of the Brinkmann withdrawal, two proposals were received on the due date of January 15, 2010.

The proposals received from The Benham Companies and Jacobs Technology were each evaluated in accordance with the solicitation. The following factors were used to evaluate proposals:

1. Mission Suitability, which consisted of four subfactors
    a. Technical Approach
    b. Schedule
    c. Project Control Plan
    d. Small Business Utilization

2. Relevant Experience and Past Performance

3. Price

In the evaluation, Mission Suitability was more important than Price, which was more important than Relevant Experience and Past Performance. Within the Mission Suitability factor, Technical Approach was significantly more important than Schedule or Project Control Plan which were equal in importance and individually more important than Commitment to Small Business Program.

The Relevant Experience and Past Performance rating was carried forward from the Phase-One evaluation, unless the Offerors introduced any new teaming partners. Neither Offeror changed teaming partners or submitted any additional past performance information, therefore their Phase-One ratings remained the same.

In evaluating Price, the SEC did not use weighting and scoring. Although Price was not adjectively rated or scored, it was used in determining the Offeror's understanding of the requirements of the RFP and the resources required to achieve successful completion.

The total price to be used for consideration in the final rating of a proposal was the total of the Base Offer cost plus the cost of all options. Use of the cost of the options in the evaluation does not obligate the Government to exercise any or all options.

The Government had developed an independent Government estimate in advance of the issuance of the solicitation as a baseline for its review.

All SEC voting members participated in the evaluation of the Mission Suitability and Pricing volumes. Each member individually reviewed the proposals to determine strengths and weaknesses within their area of expertise. The SEC collectively reviewed the individual findings of each evaluation. The SEC then reached consensus findings and assigned a rating for each factor and subfactor.

After the initial evaluation, the SEC determined that additional insight was needed into the pricing detail of each proposal. Therefore, in accordance with FAR 15.306, Exchanges with offerors after receipt of proposals, the Government issued the same clarification question to each offeror. Their responses were limited to information to clarify pricing elements only, technical and cost revisions were not permitted. Their response was requested by January 27, 2010. Both companies were timely in their response.

When this additional clarification information was received the SEC completed the evaluation of both proposals.

Findings by the SEC

Summary findings included below outline the strengths and weaknesses for each Offeror.

Mission Suitability

	Technical Approach	Schedule	Project Control Plan	Small Business Utilization	Mission Suitability
Jacobs	Very Good	Very Good	Very Good	Good	Very Good
Benham	Fair	Fair	Fair	Fair	Fair

Jacobs Evaluation Summary:

For Technical Approach Jacobs received two Significant Strengths. The Significant Strengths were because the proposal provided complete technical and cost trade studies that provided an integrated project solution which balanced cost with technical performance and provided a comprehensive technical analysis of their proposed solutions. Jacobs received a Strength for a design approach related to the recycling of waste heat and a Weakness for not providing two means of egress to the control room. For Schedule Jacobs received a Significant Strength because the activity logic and sequencing provided demonstrated a clear understanding of the Government's requirements. Jacobs did receive two weaknesses for the Schedule, one because the schedule reflected 0 (zero) days for NASA review time and one because they indicated an additional 44 days of "mini-outages" for system tie-in's, which was outside the designated four month tunnel shutdown period. For Project Control Jacobs received a Significant Strength for demonstrating thorough well-documented work processes that were established during the performance of their many successful icing wind tunnel projects. Jacobs received a Strength in Project Control because they provided an integrated design and construction team (single-source Team) with one focal point of contact. Jacobs did receive a Weakness because they did not provide further detail for the cost breakdown (e.g., schedule of values) to assist in tracking progress payments. For Small Business Utilization Jacobs received two Strengths, one for having a committed small business program in place and another because their proposed commitment meets the recommended goals for Small Business in all five of the RFP's subcategories. They did receive a Weakness because they did not submit a stand-alone subcontracting plan and they failed to complete clause H.25 Small Disadvantaged Business Participation-Contract Targets of the RFP.

Benham Evaluation Summary:

For Technical Approach Benham received a Significant Weakness because the proposal stated that the final tunnel performance risk would be transferred to the Government, which was contrary to the intent of the design/build type of procurement. Benham also received two Weaknesses; one because the proposed design concepts, although functional, was considered inefficient by the SEC, and another weakness because it provided a minimal Validation and Verification Test Plan. For Schedule Benham received a Significant Weakness because the schedule failed to demonstrate a clear understanding of the requirements and the ability to effectively manage the schedule, because the Schedule did not identify a critical path, the narrative did not address schedule risks, extended beyond the 20 month period of performance, and discrepancies were found in the activity logic and sequencing. Their Schedule contained a Weakness because the equipment and materials submittals and NASA review and approval time were not addressed. For Project Control Plan Benham received a Strength for demonstrating their understanding of the NASA culture and level of safety oversight. Benham received a Significant Weakness because the proposal did not provide any evidence of a Teaming Agreement with their major subcontractor and three Weaknesses because the same Team and overlapping schedule was proposed that is currently working on the VTC project at Plum Brook and, their proposal was too general in nature and addressed little on the IRT project and Benham's proposed SE&I approach was more suited for Space Flight Project management. For Small Business Utilization, Benham received a Strength because their proposal described a committed small business program and a Significant Weakness because it failed to meet four of the five subcategory goals of the RFP.

Relevant Experience and Past Performance

The Relevant Experience and Past Performance category was evaluated and rated during Phase-One of this Two-Phase process. Jacobs received a Significant Strength in this category. Jacobs provided strong supporting evidence based on the 30 wind tunnel projects successfully completed by their company in the past 15 years, giving the SEC a Very High Level of Confidence in their ability to not only successfully

complete this complicated project, but to also complete it within the time frame required by the Government. Benham was given a Moderate rating in this category, because Benham and their main subcontractor Aiolos lacked operations and maintenance experience with icing wind tunnels. Benham received a Moderate Level of Confidence rating from the SEC in this category. These ratings were carried forward to the Phase-Two evaluation.

Price

The price submitted by Jacobs and the price submitted by Benham were vastly different.

Offeror	Price Proposed
Jacobs Technology	$17,6969,985.00
The Benham Company	$41,144,237.00

The Government provided the offerors our projected budget based on the independent Government estimate (IGE) of $14,500,000. Based on that estimate Jacobs was 107% of the IGE, and Benham was 268% of the IGE.

Competitive Range Determination

A Source Selection presentation was made on February 3, 2010. In attendance was the SEC plus appropriate management personnel. During the presentation, the SEC reviewed the procurement activities, the RFP selection criteria, and the SEC findings and detail of the SEC's discussions with the Contractor.

It was clear from the presentation that Jacobs had provided the superior proposal and was fully capable of performing the effort. However, both proposals had weaknesses that needed to be addressed before moving forward with an award. It was my considered judgment as Source Selection Authority that, even if Benham was able to improve their technical position through the discussions process, that it was very unlikely that the SEC would be able to get the Benham proposed price down to an amount that would make them competitive for award. In making this decision, I fully took into account the fact that in the evaluation scheme, Mission Suitability was more important than price. I took into account the comparative superiority of Jacobs over Benham in Mission Suitability, as well as the very large price differential. In addition, I took into account Jacobs' superiority in Relevant Experience and Past Performance. Therefore, I determined a Competitive Range Determination of ONE was most conducive to an efficient competition and the SEC would enter into discussions with Jacobs Technology. Benham was notified of this decision on February 3, 2010.

Discussions

On February 3, 2010, Jacobs was notified that a competitive range determination had been made and that their company was included in the competitive range. It was therefore the intent of the Government to proceed with discussions. At this time, Jacobs was provided a list of their weaknesses along with questions and clarifications for discussion.

On February 8, 2010 a 2-hour teleconference was held between the SEC team and Jacobs. The parties discussed each item in detail. The Government requested that Jacobs formally address each item and submit an interim proposal to the Government by February 16, 2010.

The SEC received the interim proposal on February 16, 2010 and reviewed it in the same manner as the original submittal. A second teleconference was held with Jacobs to obtain final clarifications. As a

result of the discussions with Jacobs, both parties gained a common understanding of the requirements and expectations. The detailed technical dialogue also increased the Government's confidence in Jacob's technical ability to perform. Jacobs was able to eliminate all proposal weaknesses.

Final Evaluation

The final adjectival scoring for the Jacobs proposal is indicated below:

Technical Approach	Schedule	Project Control Plan	Small Business Utilization	Mission Suitability
Very Good	Very Good	Very Good	Good	Very Good

Technical Approach

Upon completion of discussions with Jacobs the weakness in Technical Approach was eliminated. The adjectival rating remained "Very Good." Their proposal displayed a thorough technical understanding of all elements cited in the statement of work. It included technical and cost trade studies to provide an integrated project solution which balances cost with technical performance. It provided comprehensive technical analysis of proposed solutions, which will allow the Government to assess the reasonableness of the technical solution proposed, that will assist in mitigating risk and increasing the probability of project success.

Schedule

The schedule weakness was eliminated. The final Schedule adjectival rating was "Very Good." It provided the SEC with a high level of confidence with the ability of the Jacobs Team to successfully implement the project and allow for the NASA Team to effectively manage the project.

Project Control Plan

The final Project Control Plan adjectival rating was "Very Good." It demonstrates the ability to successfully manage and control a highly complex technical project comparable to the IRT project, resulting in risk reduction. Jacobs provides an integrated design and construction team (single source Team) with a focused point of contact for responsibility and accountability.

Small Business Utilization

The Small Business Utilization weakness was eliminated. The final Small Business Utilization adjectival rating was "Good." Jacobs' proposal described a committed small business program that identified small business subcontractors and ties small business work to the WBS. Their proposed commitment meets the recommended goals for small businesses in all five RFP subcategories.

Price

During the discussion phase with Jacobs it was agreed that some additional options would be incorporated into the model contract to assist the Government in deferring the decision to exercise them after award. As a result the total contract value including the Base and all Options, if exercised will be $18,535,805.00. Due to the current funding available, the contract value at the time of award will be $16,135,500.00. The final price was in line the independent Government Estimate.

Relevant Experience and Past Performance

The Jacobs rating for this category following the Phase-One evaluation was Very High, there was no change based on the Phase-Two submittal.

Source Selection Decision

The formal Source Selection Presentation was convened on February 22, 2010. In attendance was the SEC plus appropriate management personnel. During the presentation, the SEC reviewed the procurement activities, the RFP selection criteria, and the SEC findings and details of the SEC's discussions with the Contractor.

After a review and a thorough discussion of the information presented by the Evaluation Team, I agree with the overall findings of the Team. I note that the evaluation was completed by a multi-discipline team which resulted in a comprehensive and complete evaluation.

In the area of Technical Approach, I note that Jacobs' proposal was rated "Very Good." A number of significant strengths and strengths existed in this area. Jacobs' proposal included some innovative solutions to the technical requirements that were fully considered by the evaluation team. Jacobs' proposed integrated schedule was very detailed and demonstrates the likelihood of project success within the projected period of performance. Jacobs' comprehensive approach provided broad assurances of their capability to successfully perform the project.

In the area of Relevant Experience and Past Performance, I note the proposal received a "Very Good" rating. Jacobs has demonstrated successful performance on many prior contracts with similar Icing Research Tunnels. It is further noted that Jacobs' approach as a (single source Team) for all required disciplines of this project provides additional assurance of successful contract performance.

In the area of Price, I note the evaluation team looked at a variety of pricing elements and compared the proposed price with the independent Government estimate. I note that during discussions some "puts and takes" were discussed to develop additional option items to assist the Government in working toward a contract award within the current funding limitations. At the conclusion of the discussions, the evaluation team considered the price to be reasonable.

Based on the information presented, I hereby determine that Jacobs Technology provided a fully responsive proposal to the RFP. Their comprehensive approach to perform the required work provides overall assurance to the Government of successful contract performance. I therefore select Jacobs Technology, Inc. for award of a contract to design, build and upgrade the Icing Research Tunnel (IRT) Refrigeration System at the NASA Glenn Research Center in Cleveland, Ohio.

Vernon W. Wessel
Source Selection Authority

3-1-2010
Date

Concurrence:

Bradley J. Baker
Procurement Officer

3-1-2010
Date